

THE UNIVERSITY OF WISCONSIN
COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

1630 Linden Drive Madison, Wisconsin 53706

DEPARTMENT OF PLANT PATHOLOGY

February 25, 1969

Dr. Joshua Lederberg
Department of Genetics
Stanford University School of Medicine
Palo Alto, California 94304

Dear Dr. Lederberg:

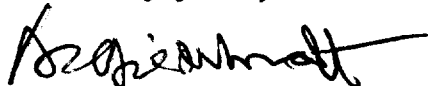
Thank you for your recent letter, copies of your papers, and your expression of interest in our work with higher plant cell protoplasts. We have just submitted two papers on this subject to the Canadian Journal of Botany and the Plant Disease Reporter. Also, we plan to present papers on the subject at the Tissue Culture Association meetings in June at Detroit and at the XI International Botanical Congress in Seattle.

Briefly stated, it has been possible to produce protoplasts from tissue cultured cells of the 19 species of plants we routinely maintain in this laboratory for this and other studies. This has been done with a purified commercial cellulase. Some protoplasts survive only a few hours, but peanut protoplasts have survived 15 days or more. The process was followed with phase microscopy in the living unstained cells growing in a microscope slide microculture. This protoplast formation we consider the first step in our goal of producing somatic hybrids. A second step was recently achieved when we were able to obtain protoplast fusions of peanut. These remained alive only a short while, but we are encouraged.

Under separate cover I am sending several reprints that you may not have seen that provide some background and encouragement for our common interests.

Best wishes from Madison.

Sincerely yours,



A. C. Hildebrandt
Professor

ACH ms

J. Schenk, Roy

HILDEBRANDT, A.